

A few years ago everyone went ape over "Hi-fi" equipment. The millions of dollars spent in this area convinced hi-fi manufacturers of two things: (1) that hi-fi was here to stay, and (2) it was time to make it obsolete! So they brought out STEREO. Stereo is very complicated. Thousands of people don't understand the first thing about it—and that's just the dealers! To confuse you even more, we herewith present a...

MAD

Guide To Stereo

ARTIST: AL JAFFEE

WRITERS: AL JAFFEE & DICK DE BARTOLO

CHAPTER I Sound Waves



Sound is made from vibrations in the air. Each vibration creates a sound wave that spreads out in wider and wider circles, much like ripples in a pond. A man has dropped a rock in the pond causing circles of water to flow outward.



To reproduce this "wave principle," expensive sound producing elements are necessary, such as amplifier, tuner, turntable, speakers, etc. Circles emanate from the spot in the pond where disgusted owner has dropped his equipment.

CHAPTER II Direction of Sound



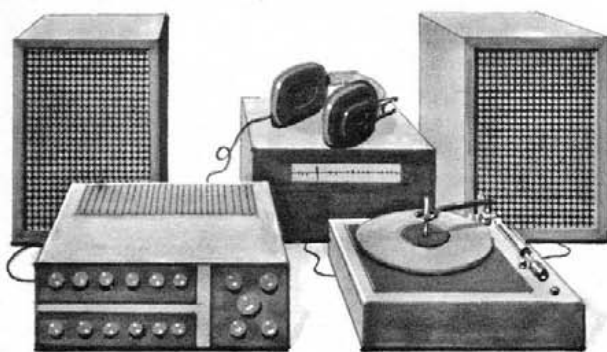
Suppose your boss calls you! You immediately turn in his direction. How did you know where he was? Simple! (Which is probably what he called you). His voice was *louder* in one ear than the other. You automatically responded to the

direction of greatest audio stimulation. The rap he gave you on the back of the skull also offered a clue. The difference of loudness in the ears created the stereo effect, the rap on the noggin created a monaural headache.

CHAPTER III Selecting Equipment

There are several ways to choose

EXPENSIVE WAY



Ready-Made Components: Even a modest set-up costs hundreds of dollars when purchased from any reputable dealer. A disreputable dealer, however, can save you hundreds of dollars, but you'll find none listed in the Yellow Pages.

INEXPENSIVE WAY

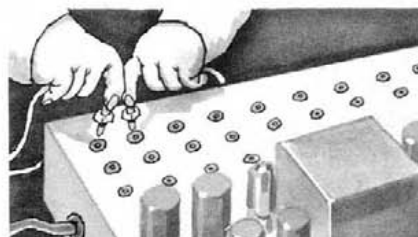
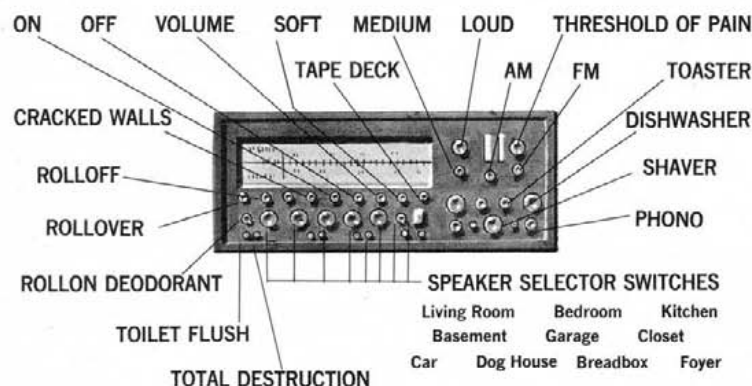


Do-it-yourself Kits: By assembling units yourself, labor costs are saved. A case in point: one dentist saved \$70 in labor costs by building unit himself, cancelling only 23 appointments in the 3 months it took him to complete it.

CHAPTER IV The Stereo Amplifier

The stereo amplifier is nothing more than a master control center. All the equipment is hooked into it so that everything can be controlled from one central point...

OPERATING THE STEREO AMPLIFIER



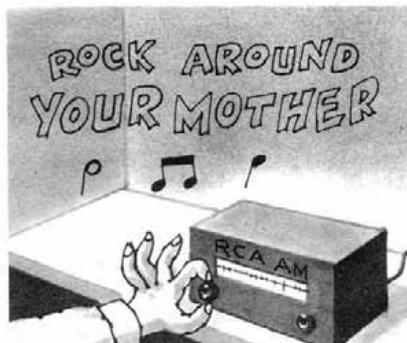
Look for tuner inputs and plug in both AM and FM jacks.



Look for auxiliary phono inputs and plug in the jacks.

CHAPTER V The Tuner

The function of the tuner is to pick up radio signals



AM TUNER: The AM tuner can only be used in the morning. It picks up pop stations, along with interference and static — which often sounds better!



FM TUNER: Due to high frequency pick-up capabilities, FM reception is much stronger, offering the listener hours of sharp, distortion-free commercials.



FM-STEREO TUNER: Does everything the FM tuner does — only double! It costs twice as much, programs are twice as bad, commercials seem twice as long!

equipment depending upon your willingness or ability to pay...

CHEAP WAY



Neighbor Hook-up: With this method, all that is needed is two speakers, connecting cable, a neighbor with a unit, and a dark night. With all the intricate wiring necessary for stereo, your neighbor will never notice two more leads.

CHEAPEST WAY YET



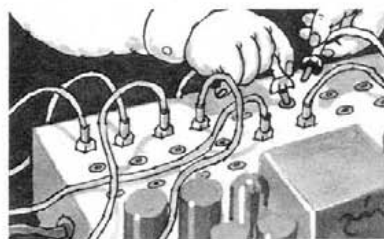
Showroom Shaft: Salesmen may often supply food, drink and records for units you are "considering". An infinite number of amplifiers, speakers, tuners and turntables can all be paired, offering years of luxurious listening at no cost.



Look for turntable inputs and plug in turntable jacks.



Look for tape deck inputs and plug in appropriate jack.



Look for amplifier outputs and connect the output jacks.



Look for TV speaker inputs and plug in the speaker jacks.



Look for the "on-off" switch and turn the whole thing on.



Look for a good excuse when electric for 50 miles blows.

and send them on to the amplifier. There are various types of tuners as shown...



STAR-KIST TUNA: Sorry, Charlie, but only the worst "tuner" jokes are used in this last, desperate attempt to inject humor into this boring article.

Major difference between AM and FM to the layman's ear is in the programming itself. Former leans heavily on the contemporary scene, the latter emphasizes longhair tastes, as listings in typical program guides show:

AM		
8:00	AM WROT	Cousin Juicy pays the top 500 of today
	WHAT	News and Static, Doug:as Toynbee analyses.
9:00	WROT	Golden Greats Hits from 8:00 show already forgotten are revived for a nostalgic glance
	WHIT	Weather and Static, Corrie Corne predicts.
	WARP	Monaural Melody Programmed for people who hate stereo. Today's selection: The right hand portion of Ravel's Bolero. Tomorrow: What's left.
10:00	WOOF	Sports and Static. Kyle plays it by rote.

FM		
8:00	AM WEET	Bird Calls of All Nations Stereo, continuous to 5 PM; host Whippoor Will.
	WAIL	Opera Round-up Today: Every opera ever recorded. Stereo, continuous to 7:00 PM, Oct. 19th, 1973.
	WRUT	Tambourine Personalities Fascinating off-stage looks at the lives of the world's best tambourine players.
9:00	WEAF	The Spoken Word, narrated by Sidney Gwirtzman. Today: Stirring speeches from the Harding Administration. Stereo, continuous to sleeping.

CHAPTER VI The Turntable

Turntables come in every size and shape, but basically there are three important types...

SIMPLE



This model is manually operated, which means that each record is played one at a time causing little or no damage.

AUTOMATIC



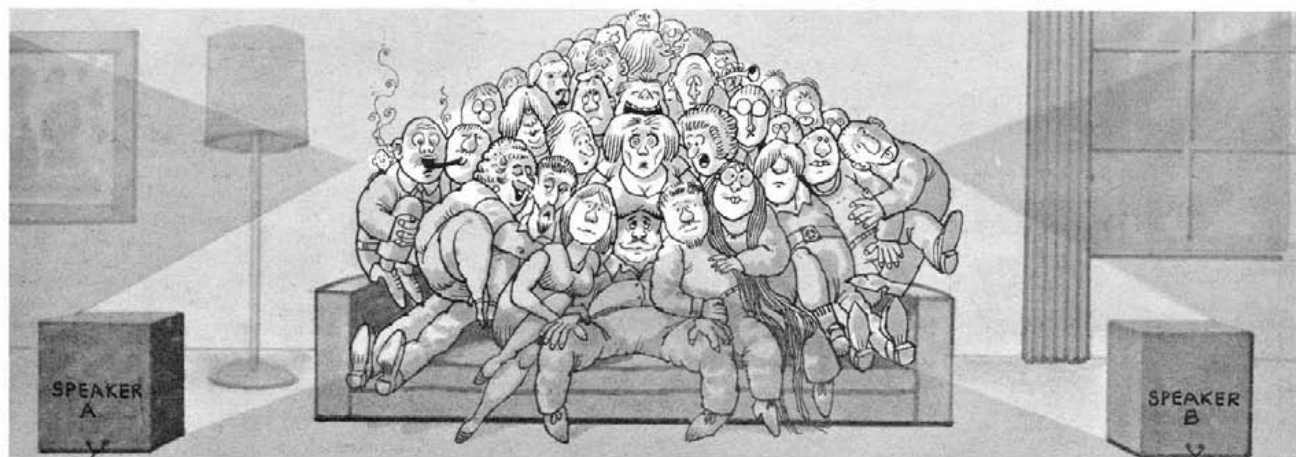
Changer apparatus of this model enables listener to hear many hours of music without interruption or disturbances.

SENSITIVE



Super automatic changer not only plays on without interruption, but rejects records it feels beneath its station.

CHAPTER VIII Seating Arrangements



When speakers are properly placed, a stereo effect area known as the "diamond of sound" is created. The actual mathematical formula is a complicated one, but it will suffice to know that the "diamond" is equi-distant from the speakers and rises 6 inches for every 2 feet back.

In other words, a couch placed centrally between the speakers 10 feet back would have a "diamond of sound" starting at 2½ feet high and ending at the ceiling. All listeners should be confined within that area to achieve maximum impression. Otherwise, you've wasted your money!

CHAPTER IX Earphones

Biggest problem with sound equipment is outside interference. Answer: *earphones!*



Earphones provide you with pure, unadulterated sound.



Earphones cut out screaming, yelling, and shouting noises.



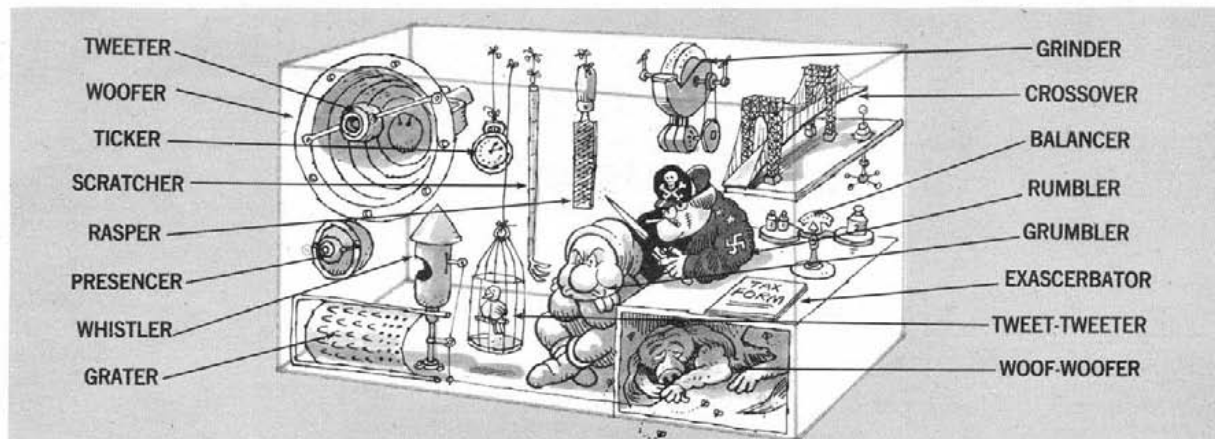
Earphones cut out running, stomping, and jumping noises.



Also siren, fire engine, and all house demolishing noises.

CHAPTER VII The Speaker

The speaker is the last link in the long stereo chain. A cutaway view shows its basic parts . . .



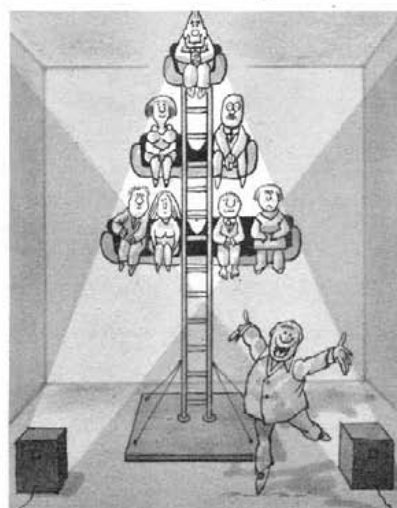
Since most equipment is purchased to impress rather than for enjoyment, careful attention must be paid to seating arrangements so that the listener will be duly impressed. Here are some helpful hints:



By bolting furniture to the floor, guests cannot possibly avoid sitting within your "diamond of sound" area.



Seat belts and head braces mounted to wall afford same results without going to furniture bolting extremes.



A popular item available for just these purposes is the new Vertico Seat Bracket. It can support tons.

Earphones also have some disadvantages...



... like a sudden increase in volume ...



... or wearing them for extended periods ...



... or forgetting about them entirely!